

Appendix 5-1
Baseline Water Quality Survey Results Conducted in
August 2009 and March 2010

Appendix 5-1 Results of Baseline Water Quality Sampling in August 2009 and March 2010

Parameters	Effluent Discharge Std. #	WQO #	NTMDC										Existing abandoned pond within Project Site		Fairview Park Nullah						
			W1/ W2				W3				W4		WE3		WE1				WE2		
			Raw Data			Average	Raw Data			Average	Raw Data	Average	Raw Data	Average	Raw Data			Average	Raw Data		Average
			21-Aug-09	28-Mar-10	30-Mar-10		21-Aug-09	28-Mar-10	30-Mar-10		21-Aug-09		21-Aug-09		21-Aug-09	28-Mar-10	30-Mar-10		28-Mar-10	30-Mar-10	
Salinity (ppt)	-	-	0.69	7.3	9.2	5.73	1.84	7.5	9.8	6.38	2.09	2.09	1.49	1.5	0.5	5.0	5.7	3.73	0.9	4.0	2.45
Water flow (m/s)	-	-	0.02	0.07	0.08	0.06	0.03	0.26	0.03	0.11	0.02	0.02	0.01	0.01	0.06	0.067	0.059	0.06	0.031	0.006	0.02
Water flow (L/s)			**	1499.9	2648.4	2074.15	**	8482.5	2075.6	5279.05	**	**	**	**	**	38.3	206.8	122.55	9.8	1.55	5.68
Water depth (m)	-	-	1.8	0.9	1.4	1.4	1.9	1.5	2.4	1.9	1.9	1.9	0.3	0.3	1.1	0.1	0.7	0.6	0.1	0.1	0.1
Water Temperature (°C)	30	-	29.2	18.5	18.8	22.2	30.7	18.6	18.8	22.7	31.8	31.82	32.63	32.6	33.96	19.2	19.1	24.1	17.15	18.2	17.7
pH Value	6-10	6-9	7.07	7.18	7.39	7.21	7.4	6.97	7.26	7.21	7.67	7.67	8.86	8.86	8.86	7.31	7.52	7.90	7.155	7.67	7.41
Dissolved Oxygen (mg/L)	-	4	4.56	3.31	2.88	3.58	4.07	2.08	3.14	3.10	2.27	2.27	7.79	7.79	7.79	6.93	2.57	5.76	7.405	7.725	7.57
Dissolved Oxygen Saturation (%)	-	-	59.6	37	31.6	42.7	55.1	23.25	34.8	37.7	31.3	31.25	108.70	108.70	108.7	77.35	28.65	71.57	77.8	84.55	81.18
Turbidity (NTU)	-	-	13.5	31.8	49.1	31.5	16.05	50.95	50.6	39.2	16.0	16.00	54.30	54.30	54.3	19.4	45.5	39.73	28.55	26.9	27.73
BOD5 (mg/L)	20	5	2	13	8	8	3	12	6	7	3	3	16.00	16	16	25	26	22	8	6	7
COD (mg/L)	80	30	16	15	29	20	20	6	34	20	24	24	116.00	116	116	84	90	97	50	28	39
Suspended Solids (mg/L)	30	20	14	43	46	34	18	66	48	44	19	19	81	81	81	53	69	68	49	39	44
Ammonia-nitrogen (mg/L)	10-20	0.021	2.68	8.22	7.55	6.15	3.52	8.23	7.34	6.36	3.80	3.80	0.08	0.08	0.08	10.9	9.11	6.70	0.81	1.19	1.00
E-coli (cfu/100 ml)	1,000	1,000	5,400	26,000	10,000	13,800	7,200	18,000	14,000	13,067	6,200	6,200	39.00	39	39	5,800	2,700	2,846	130,000	5,000	67,500

Remark: Average levels based on the water sampling in August 2009 and March 2010.

According to the standard stated in Section 5.2.2 of the EIA report.

The original sampling location at W1 at NTMDC was not accessible during the sampling in March 2010. Thus, an alternative location W2 was selected for sampling.

Testing parameters that were identified to be in poor condition during the water sampling in August 2009 (Section 5.3.3 of the EIA report refers) as well as those key WQO parameters stated in Section 5.2.2, were selected for laboratory testing during the sampling in March 2010.

Water samplings and testings were conducted by a HOKLAS accredited laboratory, ALS Technichem (HK) Pty Ltd.

** no measurement in L/S was undertaken in the survey.